IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	)	
	)	
Jai-young KIM	)	Group Art Unit: Unassigned
	)	
Application No.: New Application	)	Examiner: Unassigned
	)	
Filed: Herewith	)	
	)	
For: PERPENDICULAR MAGNETIC	)	
RECORDING DISK	)	

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Prior to examination on the merits, kindly amend the above-captioned application as

follows:

IN THE SPECIFICATION:

Kindly add the following paragraph on page 1, after the title of the invention and

before the "Background of the Invention," --Priority is claimed to Patent Application

Number 2000-86269, filed in the Republic of Korea on December 29, 2000, herein

incorporated by reference.--

IN THE CLAIMS:

Kindly replace claims 3-5 and 11 as follows:

3. (Amended) The perpendicular magnetic recording layer of claim 1, wherein, in the range of thickness of the perpendicular magnetic recording layer, the rate of variation of the ratio of perpendicular remanent magnetization of maximum perpendicular remanent magnetization is greater than of the ratio of perpendicular coercivity Hc to maximum perpendicular coercivity Ho.

4. (Amended) The perpendicular magnetic recording layer of claim 1, wherein, in the range of thickness of the perpendicular magnetic recording layer, a noise level constant of proportionality α expressed as the following formula decreases with reduced thickness of the perpendicular magnetic recording layer:

$$\alpha = \frac{4\pi Mr}{Hc}$$

where Mr is the perpendicular remanent magnetization and Hc is the perpendicular coercivity.

5. (Amended) The perpendicular magnetic recording disk of claim 1, wherein the perpendicular magnetic recording layer is formed of a CoCr alloy.

11. (Amended) The perpendicular magnetic recording disk of claim 1, further comprising a protective layer and a lubricant layer sequentially on the perpendicular magnetic recording layer.

Kindly add claims 12-15 as follows:

--12. (New) The perpendicular magnetic recording layer of claim 2, wherein, in the range of thickness of the perpendicular magnetic recording layer, the rate of variation of the ratio of perpendicular remanent magnetization of maximum perpendicular remanent magnetization is greater than of the ratio of perpendicular coercivity Hc to maximum perpendicular coercivity Ho.

13. (New) The perpendicular magnetic recording layer of claim 2, wherein, in the range of thickness of the perpendicular magnetic recording layer, a noise level constant of proportionality α expressed as the following formula decreases with reduced thickness of the perpendicular magnetic recording layer:

$$\alpha = \frac{4\pi Mr}{Hc}$$

where Mr is the perpendicular remanent magnetization and Hc is the perpendicular coercivity.

14. (New) The perpendicular magnetic recording disk of claim 2, wherein the perpendicular magnetic recording layer is formed of a CoCr alloy.
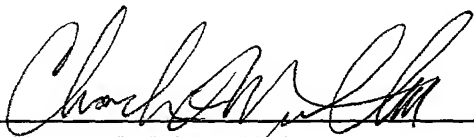
15. (New) The perpendicular magnetic recording disk of claim 2, further

comprising a protective layer and a lubricant layer sequentially on the perpendicular

magnetic recording layer.--

REMARKS

A change has been made to the specification by the above amendments. Claims 3-5

and 11 have been amended and claims 12-15 have been added to remove multiple

dependency. Favorable action on the merits is respectfully requested.

Respectfully submitted,

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Attachment to Preliminary Amendment

Marked-up copy of Claims 3-5 and 11

3. (Amended) The perpendicular magnetic recording layer of claim 1 [or 2], wherein, in the range of thickness of the perpendicular magnetic recording layer, the rate of variation of the ratio of perpendicular remanent magnetization of maximum perpendicular remanent magnetization is greater than of the ratio of perpendicular coercivity Hc to maximum perpendicular coercivity Ho.

4. (Amended) The perpendicular magnetic recording layer of claim 1 [or 2], wherein, in the range of thickness of the perpendicular magnetic recording layer, a noise level constant of proportionality α expressed as the following formula decreases with reduced thickness of the perpendicular magnetic recording layer:

$$\alpha = \frac{4\pi M r}{Hc}$$

where Mr is the perpendicular remanent magnetization and Hc is the perpendicular coercivity.

5. (Amended) The perpendicular magnetic recording disk of claim 1 [or 2], wherein the perpendicular magnetic recording layer is formed of a CoCr alloy.

11. (Amended) The perpendicular magnetic recording disk of claim 1 [or 2],

further comprising a protective layer and a lubricant layer sequentially on the perpendicular

magnetic recording layer.